

SEQUENCE LISTING

<110> Haruo Sugiyama
Chugai Seiyaku Kabushiki Kaisha
Sumitomo Pharmaceuticals Company, Limited

<120> HLA-A24-RESTRICTED CANCER ANTIGEN PEPTIDES

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<140> PCT/JP03/07463

<141> 2003-06-12

<150> JP 2002-171518

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<150> JP 2002-275572

<151> 2002-09-20

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<213> Homo sapiens

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Gln Trp Ala Pro Val Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr
35 40 45

Gly Ser Leu Gly Gly Pro Ala Pro Pro Pro Ala Pro Pro Pro Pro
50 55 60

Pro Pro Pro Pro His Ser Phe Ile Lys Gln Glu Pro Ser Trp Gly Gly
65 70 75 80

Ala Glu Pro His Glu Glu Gln Cys Leu Ser Ala Phe Thr Val His Phe
85 90 95

Ser Gly Gln Phe Thr Gly Thr Ala Gly Ala Cys Arg Tyr Gly Pro Phe
100 105 110

Gly Pro Pro Pro Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe
 115 120 125

Pro Asn Ala Pro Tyr Leu Pro Ser Cys Leu Glu Ser Gln Pro Ala Ile
 130 135 140

Arg Asn Gln Gly Tyr Ser Thr Val Thr Phe Asp Gly Thr Pro Ser Tyr
 145 150 155 160

Gly His Thr Pro Ser His His Ala Ala Gln Phe Pro Asn His Ser Phe
 165 170 175

Lys His Glu Asp Pro Met Gly Gln Gln Gly Ser Leu Gly Glu Gln Gln
 180 185 190

Tyr Ser Val Pro Pro Pro Val Tyr Gly Cys His Thr Pro Thr Asp Ser
 195 200 205

Cys Thr Gly Ser Gln Ala Leu Leu Leu Arg Thr Pro Tyr Ser Ser Asp
 210 215 220

Asn Leu Tyr Gln Met Thr Ser Gln Leu Glu Cys Met Thr Trp Asn Gln
 225 230 235 240

Met Asn Leu Gly Ala Thr Leu Lys Gly Val Ala Ala Gly Ser Ser Ser
 245 250 255

Ser Val Lys Trp Thr Glu Gly Gln Ser Asn His Ser Thr Gly Tyr Glu
 260 265 270

Ser Asp Asn His Thr Thr Pro Ile Leu Cys Gly Ala Gln Tyr Arg Ile
 275 280 285

His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg Arg Val Pro
 290 295 300

Gly Val Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser Glu Lys
 305 310 315 320

Arg Pro Phe Met Cys Ala Tyr Pro Gly Cys Asn Lys Arg Tyr Phe Lys
 325 330 335

Leu Ser His Leu Gln Met His Ser Arg Lys His Thr Gly Glu Lys Pro
 340 345 350

Tyr Gln Cys Asp Phe Lys Asp Cys Glu Arg Arg Phe Ser Arg Ser Asp
 355 360 365

Gln Leu Lys Arg His Gln Arg Arg His Thr Gly Val Lys Pro Phe Gln
 370 375 380

Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr
 385 390 395 400

His Thr Arg Thr His Thr Gly Lys Thr Ser Glu Lys Pro Phe Ser Cys
 405 410 415

Arg Trp Pro Ser Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val
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Arg His His Asn Met His Gln Arg Asn Met Thr Lys Leu Gln Leu Ala
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Leu

<210> 2

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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Arg Tyr Phe Pro Asn Ala Pro Tyr Leu

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<210> 3

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<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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Arg Tyr Pro Gly Val Ala Pro Thr Leu

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<210> 4

<211> 9

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<223> Description of Artificial Sequence: Synthetic Peptide

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Arg Tyr Pro Ser Cys Gln Lys Lys Phe

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<210> 5

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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Ala Tyr Leu Pro Ala Val Pro Ser Leu

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<210> 6

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 6

Asn Tyr Met Asn Leu Gly Ala Thr Leu

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<210> 7

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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Arg Val Pro Gly Val Ala Pro Thr Leu

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<210> 8

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 8

Arg Met Phe Pro Asn Ala Pro Tyr Leu

1

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<210> 9

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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Arg Trp Pro Ser Cys Gln Lys Lys Phe

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<210> 10

<211> 10

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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Gln Tyr Arg Ile His Thr His Gly Val Phe

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<210> 11

<211> 10

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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Ala Tyr Pro Gly Cys Asn Lys Arg Tyr Phe
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<210> 12

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 12

Arg Tyr Phe Pro Asn Ala Pro Tyr Phe
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<210> 13

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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Arg Tyr Phe Pro Asn Ala Pro Tyr Trp
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<210> 14

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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Arg Tyr Phe Pro Asn Ala Pro Tyr Ile
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<210> 15

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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Arg Tyr Phe Pro Asn Ala Pro Tyr Met
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<210> 16

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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Arg Tyr Pro Gly Val Ala Pro Thr Phe
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<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

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<210> 18

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<223> Description of Artificial Sequence: Synthetic Peptide

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<210> 20
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<210> 21
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<223> Description of Artificial Sequence: Synthetic Peptide

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<210> 22
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<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic Peptide

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<210> 23

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 23

Arg Tyr Pro Ser Cys Gln Lys Lys Met

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<210> 24

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 24

Ala Tyr Leu Pro Ala Val Pro Ser Phe

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<210> 25

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 25

Ala Tyr Leu Pro Ala Val Pro Ser Trp

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<210> 26

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 26

Ala Tyr Leu Pro Ala Val Pro Ser Ile

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<210> 27

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 27

Ala Tyr Leu Pro Ala Val Pro Ser Met

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<210> 28

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 28

Asn Tyr Met Asn Leu Gly Ala Thr Phe

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<210> 29

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 29

Asn Tyr Met Asn Leu Gly Ala Thr Trp

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<210> 30

<211> 9

<212> PRT
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 30
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<210> 31
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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 31
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<210> 32
<211> 21
<212> PRT
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic Peptide

<400> 32
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<210> 33
<211> 3857
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: The DNA region from position 1 to position 1550 is derived from human, and the DNA region from position 1551 to position 3857

is derived from mouse.

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caacctatgt	agggctcttc	ttcctggata	ctcacgacgc	ggaccagttt	ctcactccca	420
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gaaagggcag	agtctgagtt	ttctctcagc	ctcctttaga	gtgtgctctg	ctcatcaatg	2640
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<210> 34

<211> 1119

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: The DNA region from position 1 to position 618 is derived from human, and the DNA region from position 619 to position 1119 is derived from mouse.

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ctg gcc ctg acc cag acc tgg gca ggc tcc cac tcc atg agg tat ttc 96
Leu Ala Leu Thr Gln Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe
          20              25              30

tcc aca tcc gtg tcc cgg ccc ggc cgc ggg gag ccc cgc ttc atc gcc 144
Ser Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala
          35              40              45

gtg ggc tac gtg gac gac acg cag ttc gtg cgg ttc gac agc gac gcc 192
Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala
          50              55              60

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65					70					75					80	
ccg	gag	tat	tgg	gac	gag	gag	aca	ggg	aaa	gtg	aag	gcc	cac	tca	cag	288
Pro	Glu	Tyr	Trp	Asp	Glu	Glu	Thr	Gly	Lys	Val	Lys	Ala	His	Ser	Gln	
				85					90					95		
act	gac	cga	gag	aac	ctg	cgg	atc	gcg	ctc	cgc	tac	tac	aac	cag	agc	336
Thr	Asp	Arg	Glu	Asn	Leu	Arg	Ile	Ala	Leu	Arg	Tyr	Tyr	Asn	Gln	Ser	
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gag	gcc	ggt	tct	cac	acc	ctc	cag	atg	atg	ttt	ggc	tgc	gac	gtg	ggg	384
Glu	Ala	Gly	Ser	His	Thr	Leu	Gln	Met	Met	Phe	Gly	Cys	Asp	Val	Gly	
		115					120					125				
tcg	gac	ggg	cgc	ttc	ctc	cgc	ggg	tac	cac	cag	tac	gcc	tac	gac	ggc	432
Ser	Asp	Gly	Arg	Phe	Leu	Arg	Gly	Tyr	His	Gln	Tyr	Ala	Tyr	Asp	Gly	
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Lys	Asp	Tyr	Ile	Ala	Leu	Lys	Glu	Asp	Leu	Arg	Ser	Trp	Thr	Ala	Ala	
145					150					155					160	
gac	atg	gcg	gct	cag	atc	acc	aag	cgc	aag	tgg	gag	gcg	gcc	cat	gtg	528
Asp	Met	Ala	Ala	Gln	Ile	Thr	Lys	Arg	Lys	Trp	Glu	Ala	Ala	His	Val	
				165					170					175		
gcg	gag	cag	cag	aga	gcc	tac	ctg	gag	ggc	acg	tgc	gtg	gac	ggg	ctc	576
Ala	Glu	Gln	Gln	Arg	Ala	Tyr	Leu	Glu	Gly	Thr	Cys	Val	Asp	Gly	Leu	
			180					185					190			
cgc	aga	tac	ctg	gag	aac	ggg	aag	gag	acg	ctg	cag	cgc	acg	gat	tcc	624
Arg	Arg	Tyr	Leu	Glu	Asn	Gly	Lys	Glu	Thr	Leu	Gln	Arg	Thr	Asp	Ser	
		195					200					205				
cca	aag	gcc	cat	gtg	acc	cat	cac	agc	aga	cct	gaa	gat	aaa	gtc	acc	672
Pro	Lys	Ala	His	Val	Thr	His	His	Ser	Arg	Pro	Glu	Asp	Lys	Val	Thr	
	210					215					220					
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Leu	Arg	Cys	Trp	Ala	Leu	Gly	Phe	Tyr	Pro	Ala	Asp	Ile	Thr	Leu	Thr	
225					230					235					240	
tgg	cag	ttg	aat	ggg	gag	gag	ctg	atc	cag	gac	atg	gag	ctt	gtg	gag	768
Trp	Gln	Leu	Asn	Gly	Glu	Glu	Leu	Ile	Gln	Asp	Met	Glu	Leu	Val	Glu	
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acc agg cct gca ggg gat gga acc ttc cag aag tgg gca tct gtg gtg	816
Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ser Val Val	
260 265 270	
gtg cct ctt ggg aag gag cag tat tac aca tgc cat gtg tac cat cag	864
Val Pro Leu Gly Lys Glu Gln Tyr Tyr Thr Cys His Val Tyr His Gln	
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ggg ctg cct gag ccc ctc acc ctg aga tgg gag cct cct cca tcc act	912
Gly Leu Pro Glu Pro Leu Thr Leu Arg Trp Glu Pro Pro Pro Ser Thr	
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gtc tcc aac atg gcg acc gtt gct gtt ctg gtt gtc ctt gga gct gca	960
Val Ser Asn Met Ala Thr Val Ala Val Leu Val Val Leu Gly Ala Ala	
305 310 315 320	
ata gtc act gga gct gtg gtg gct ttt gtg atg aag atg aga agg aga	1008
Ile Val Thr Gly Ala Val Val Ala Phe Val Met Lys Met Arg Arg Arg	
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Asn Thr Gly Gly Lys Gly Gly Asp Tyr Ala Leu Ala Pro Gly Ser Gln	
340 345 350	
acc tct gat ctg tct ctc cca gat tgt aaa gtg atg gtt cat gac cct	1104
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<210> 35

<211> 372

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: The polypeptide region from position 1 to position 206 is derived from human, and the polypeptide region from position 207 to position 372 is derived from mouse.

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5

10

15

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 35 40 45

Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala
 50 55 60

Ala Ser Gln Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly
 65 70 75 80

Pro Glu Tyr Trp Asp Glu Glu Thr Gly Lys Val Lys Ala His Ser Gln
 85 90 95

Thr Asp Arg Glu Asn Leu Arg Ile Ala Leu Arg Tyr Tyr Asn Gln Ser
 100 105 110

Glu Ala Gly Ser His Thr Leu Gln Met Met Phe Gly Cys Asp Val Gly
 115 120 125

Ser Asp Gly Arg Phe Leu Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly
 130 135 140

Lys Asp Tyr Ile Ala Leu Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala
 145 150 155 160

Asp Met Ala Ala Gln Ile Thr Lys Arg Lys Trp Glu Ala Ala His Val
 165 170 175

Ala Glu Gln Gln Arg Ala Tyr Leu Glu Gly Thr Cys Val Asp Gly Leu
 180 185 190

Arg Arg Tyr Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg Thr Asp Ser
 195 200 205

Pro Lys Ala His Val Thr His His Ser Arg Pro Glu Asp Lys Val Thr
 210 215 220

Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Asp Ile Thr Leu Thr
 225 230 235 240

Trp Gln Leu Asn Gly Glu Glu Leu Ile Gln Asp Met Glu Leu Val Glu
 245 250 255

Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ser Val Val
 260 265 270

Val Pro Leu Gly Lys Glu Gln Tyr Tyr Thr Cys His Val Tyr His Gln
 275 280 285

Gly Leu Pro Glu Pro Leu Thr Leu Arg Trp Glu Pro Pro Pro Ser Thr
 290 295 300

Val Ser Asn Met Ala Thr Val Ala Val Leu Val Val Leu Gly Ala Ala
 305 310 315 320

Ile Val Thr Gly Ala Val Val Ala Phe Val Met Lys Met Arg Arg Arg
 325 330 335

Asn Thr Gly Gly Lys Gly Gly Asp Tyr Ala Leu Ala Pro Gly Ser Gln
 340 345 350

Thr Ser Asp Leu Ser Leu Pro Asp Cys Lys Val Met Val His Asp Pro
 355 360 365

His Ser Leu Ala
 370

<210> 36

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 36

cccaagctta ctctctggca ccaaactcca tgggat

36

<210> 37

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 37

cgggagatct acaggcgatc aggtaggcgc

30

<210> 38

<211> 30

<212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 38

cgcaggtctt cacactattc aggtgatctc

30

<210> 39

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 39

cggaattccg agtctctgat ctttagccct gggggctc

38

<210> 40

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 40

aggacttgga ctctgagagg cagggtctt

29

<210> 41

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 41

catagtcctc tcctttcca cctgtgagaa

30

<210> 42

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 42

cgaaccctcg tcctgtact etc

23

<210> 43

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 43

agcatagtcc cctccttttc cac

23

<210> 44

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 44

cccaagcttc gccgaggatg gccgtcatgg cgccccgaa

39

<210> 45

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 45

ccggaattct gtcttcacgc tagagaatga gggtcatgaa c

41

<210> 46

<211> 9

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Peptide

<400> 46
Pro Tyr Val Ser Arg Leu Leu Gly Ile
5

<210> 47
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Peptide

<400> 47
Ile Met Pro Lys Ala Gly Leu Leu Ile
5

<210> 48
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Peptide

<400> 48
Thr Tyr Ala Cys Phe Val Ser Asn Leu
5

<210> 49
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Peptide

<400> 49
Gln Tyr Ser Trp Phe Val Asn Gly Thr Phe
5 10

<210> 50

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 50

Ala	Gln	Tyr	Ile	Lys	Ala	Asn	Ser	Lys	Phe	Ile	Gly	Ile	Thr	Glu	Leu
1				5				10						15	

<210> 51

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 51

Ala	Leu	Leu	Pro	Ala	Val	Pro	Ser	Leu
1				5				

<210> 52

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 52

Asn	Gln	Met	Asn	Leu	Gly	Ala	Thr	Leu
1				5				

<210> 53

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 53

Arg Phe Phe Pro Asn Ala Pro Tyr Leu

1

5

<210> 54

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 54

Arg Trp Phe Pro Asn Ala Pro Tyr Leu

1

5

<210> 55

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 55

Arg Phe Pro Gly Val Ala Pro Thr Leu

1

5

<210> 56

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 56

Arg Met Pro Gly Val Ala Pro Thr Leu

1

5

<210> 57

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 57

Arg Trp Pro Gly Val Ala Pro Thr Leu

1

5

<210> 58

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 58

Arg Phe Pro Ser Cys Gln Lys Lys Phe

1

5

<210> 59

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 59

Arg Met Pro Ser Cys Gln Lys Lys Phe

1

5

<210> 60

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 60

Ala Phe Leu Pro Ala Val Pro Ser Leu

1

5

<210> 61
<211> 9
<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic Peptide

<400> 61
Ala Met Leu Pro Ala Val Pro Ser Leu
1 5

<210> 62
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Peptide

<400> 62
Ala Trp Leu Pro Ala Val Pro Ser Leu
1 5

<210> 63
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Peptide

<400> 63
Asn Phe Met Asn Leu Gly Ala Thr Leu
1 5

<210> 64
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Peptide

<400> 64

Asn Met Met Asn Leu Gly Ala Thr Leu

1

5

<210> 65

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 65

Asn Trp Met Asn Leu Gly Ala Thr Leu

1

5

<210> 66

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 66

Arg Tyr Pro Ser Ser Gln Lys Lys Phe

1

5

<210> 67

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 67

Arg Tyr Pro Ser Ala Gln Lys Lys Phe

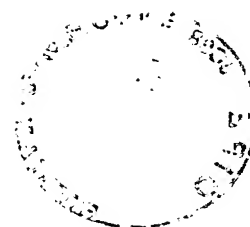
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5

<210> 68

<211> 9

<212> PRT



<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<223> Xaa at position 5 stands for Abu.

<400> 68

Arg Tyr Pro Ser Xaa Gln Lys Lys Phe

1

5